

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-11 (Cancelled)

12. (Original) A method of manufacturing a semiconductor device comprising steps of:

(a) preparing an SOI substrate formed by a semiconductor substrate <1>, an embedded insulating layer <2> and an SOI layer <3>;

(b) selectively forming an isolation film <31> in an upper layer part of said SOI layer while forming a first conductivity type semiconductor region <11, 12> in a lower layer part of said isolation film so that said isolation film separates said SOI layer into a plurality of element forming regions and at least one said element forming region has a first conductivity type and is formed in contact with said semiconductor region among said plurality of element forming regions;

(c) selectively forming a second conductivity type active region <5, 6> on the surface of said at least one element forming region; and

(d) forming a first conductivity type body region <10> capable of being externally fixed in electric potential in said SOI layer to be in contact with said semiconductor region, wherein

said step (c) is carried out for forming said active region by setting a block region <41 to 45> including said body region and a partial region of said isolation film to a region inhibiting

introduction of an impurity of said second conductivity type and introducing said impurity of said second conductivity type into said SOI layer.

13. (Previously Presented) The method of manufacturing a semiconductor device according to claim 12, wherein

said step (c) includes a step of introducing an impurity of said second conductivity type into said SOI layer using a mask of a first resist film <51, 52> formed on said block region.

14. (Previously Presented) The method of manufacturing a semiconductor device according to claim 13, wherein

said at least one element forming region includes a region for forming a transistor,

said method further comprising:

(e) a step executed in advance of said step (c) for forming a gate electrode <9> of said transistor on said at least one element forming region, said gate electrode being formed to extend on said isolation film,

said step (c) including a step of introducing an impurity of said second conductivity type into said SOI layer using masks of said first resist film and said gate electrode.

15. (Original) The method of manufacturing a semiconductor device according to claim 14, wherein

said first resist film and said gate electrode are continuously formed on a region reaching said at least one element forming region from said body region.

16. (Previously Presented) The method of manufacturing a semiconductor device according to claim 12, wherein

said at least one element forming region includes a region for forming a transistor, said method further comprising: (e) a step executed in advance of said step (c) for forming a gate electrode <9> of said transistor on said at least one element forming region, said gate electrode being formed to extend on part of said isolation film, said step (c) including a step of introducing an impurity of said second conductivity type into said SOI layer using masks of a first resist film formed on said body region and said gate electrode.

17. (Original) The method of manufacturing a semiconductor device according to claim 16, wherein

said gate electrode is formed on a region reaching said at least one element forming region from said body region.

18. (Previously Presented) The method of manufacturing a semiconductor device according to claim 12, wherein

said step (c) includes a step of introducing an impurity of said second conductivity type into said SOI layer using a mask of a first resist film <62> having a first opening on said active region, and

said step (d) includes a step of introducing an impurity of said first conductivity type into said SOI layer using a mask of a second resist film <61, 63> having a second opening on said body region.

19. (Original) The method of manufacturing a semiconductor device according to claim 18, wherein

said second opening includes an opening provided substantially only on said body region.

20. (Original) The method of manufacturing a semiconductor device according to claim 18, wherein

said second opening includes an opening provided on said body region and part of said isolation film.

21. (Original) The method of manufacturing a semiconductor device according to claim 20, wherein

said second opening includes an opening provided on a region reaching said at least one element forming region from said body region.

22. (Original) The method of manufacturing a semiconductor device according to claim 18, wherein

said first resist film further has a first dummy opening <71> on a region other than said body region, said semiconductor region and said at least one element forming region, and

said second resist film further has a second dummy opening <72> on a region other than said body region, said semiconductor region and said at least one element forming region.

23. (Original) The method of manufacturing a semiconductor device according to claim 22, wherein

said first and second dummy openings are formed on the same position in the same shape.

24. (Original) The method of manufacturing a semiconductor device according to claim 22, wherein

said first and second dummy openings are formed without overlapping with each other.

25. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

(a) preparing an SOI substrate formed by a semiconductor substrate, an insulating layer on said semiconductor substrate and a silicon layer on said insulating layer and said silicon layer has a first conductivity type in first, second and third regions;

(b) forming a partial oxide film with thickness not reaching to said insulating layer in a surface of said silicon layer in said second region between said first and third regions;

(c) forming a gate electrode through a gate oxide film on said surface of said silicon layer in said first region, said gate electrode extending on said partial oxide film in said second region;

(d) introducing a first impurity of a second conductivity type into both ends of said gate electrode in said first region using a first mask layer covering said third region and exposing said first region; and

(e) introducing a second impurity of said first conductivity type into said third region using a second mask layer covering said first region and exposing said third region, wherein

said first mask layer covers said third and second regions and a part of said gate electrode in said second region.

26. (Previously Presented) The method of manufacturing a semiconductor device according to claim 25, wherein

said silicon layer includes a fourth region of said second conductivity type different from said first, second and third regions,

in said step (d), said first mask layer covers said fourth region,

in said step (e), said second mask layer exposes said fourth region, and

said second impurity is introduced into said fourth region.

27. (New) A method of manufacturing a semiconductor device comprising the steps of:

(a) preparing an SOI substrate formed by a semiconductor substrate, an insulating layer on said semiconductor substrate and a silicon layer on said insulating layer and said silicon layer has a first conductivity type in first, second and third regions;

(b) forming a partial oxide film with thickness not reaching to said insulating layer in a surface of said silicon layer in said second region between said first and third regions;

(c) forming a gate electrode through a gate oxide film on said surface of said silicon layer in said first region, said gate electrode extending on said partial oxide film in said second region;

(d) introducing a first impurity of a second conductivity type into both ends of said gate electrode in said first region using a first mask layer covering said third region and exposing said first region; and

(e) introducing a second impurity of said first conductivity type into said third region using a second mask layer covering said first region and exposing said third region, wherein said first mask layer extends from said third region to said second region and covers a part of said gate electrode in said second region.

28. (New) The method of manufacturing a semiconductor device according to claim 27, wherein

said silicon layer includes a fourth region of said second conductivity type different from said first, second and third regions,

in said step (d), said first mask layer covers said fourth region,

in said step (e), said second mask layer exposes said fourth region, and

said second impurity is introduced into said fourth region.

29. (New) A method of manufacturing a semiconductor device comprising the steps of:

(a) preparing an SOI substrate formed by a semiconductor substrate, an insulating layer on said semiconductor substrate and a silicon layer on said insulating layer and said silicon layer has a first conductivity type in first, second and third regions;

(b) forming a partial oxide film with thickness not reaching to said insulating layer in a surface of said silicon layer in said second region between said first and third regions;

(c) forming a gate electrode through a gate oxide film on said surface of said silicon layer in said first region, said gate electrode extending on said partial oxide film in said second region;

(d) introducing a first impurity of a second conductivity type into both ends of said gate electrode in said first region using a first mask layer covering said third region and exposing said first region; and

(e) introducing a second impurity of said first conductivity type into said third region using a second mask layer covering said first region and exposing said third region, wherein

said first mask layer covers said partial oxide film and a part of said gate electrode in said second region.

30. (New) The method of manufacturing a semiconductor device according to claim 29, wherein

said silicon layer includes a fourth region of said second conductivity type different from said first, second and third regions,

in said step (d), said first mask layer covers said fourth region,

in said step (e), said second mask layer exposes said fourth region, and

said second impurity is introduced into said fourth region.